

CLAIMS

What is claimed is:

1. A method of controlling an application comprising:
 - 5 receiving, from a device, a first message via a non-session based messaging protocol;
 - maintaining a session context that maps messages transferred from the device using the non-session based protocol to a session-based application controlled using a session-based protocol;
 - 10 mapping the first message from the device using the non-session based messaging protocol to the session-based protocol using the maintained session context to allow the device to control the session-based application; and
 - mapping a second message received from the application using the session-based protocol from the session-based application to the non-session based protocol using the
 - 15 maintained session context to return at least a portion of the second message to the device.
2. The method of claim 1 wherein the first message corresponds to the session-based application and is indicative of a request to invoke the session-based application.
- 20 3. The method of claim 1 further comprising employing the maintained session context for successive messages between the device and the application.
4. The method of claim 1 further comprising identifying the session context between
- 25 the session-based application and the device, the session context operative to enable a stateful exchange between the session-based application and the device.
5. The method of claim 4 wherein mapping the first message further comprises routing, based on the identified session context, at least a portion of the message to the
- 30 application, the routing operative to receive and direct user input destined for the application.

6. The method of claim 5 further comprising processing a script corresponding to the identified session context to receive and direct a portion of the message to the application.

5

7. The method of claim 6 wherein routing is operable to preserve the session context by maintaining the sequence of messages between the device and the application.

8. The method of claim 1 wherein the session context is maintained based on an identity of the device and an identity of the application.

10

9. A method for providing context specific application support for an interactive user device in an information transport infrastructure comprising:

15

receiving a message from a user via a user device, the message corresponding to an application;

identifying a session context between the application and the user device, the session context based on an identity of the user device and an identity of the application;

processing the message by the corresponding application according to the identified session context; and

20

mapping successive messages between the user device and the application by indexing the user device identity and application identity to preserve the session context by maintaining the order of messages between the user device and the application.

10. The method of claim 9 further comprising:

25

establishing the session context via the received message, the received message indicative of the application to establish the session context between a text messaging user device and the application; and

invoking the application, the application responsive to the session context and operative to send and receive messages corresponding to the established session context.

30

11. The method of claim 10 wherein establishing the session context further comprises:

- receiving a unique preexisting identifier corresponding to the application;
- creating a session context entry in a session table based on the identity of the user
5 device and the unique preexisting identifier; and
- referencing, via the unique preexisting identifier, the corresponding application.

12. The method of claim 11 wherein mapping the successive messages includes mapping successive messages from the device to the same application by indexing the
10 identity of the user device and the unique preexisting identifier of the application into a session table having session context entries of wireless telephone numbers and application short codes.

13. The method of claim 12 wherein mapping the successive messages further
15 comprises processing a script corresponding to the identified session context to receive and direct the message to the application.

14. The method of claim 12 wherein mapping the successive messages further comprises emulating a connection ID in the interactive voice response infrastructure by
20 associating the session context with an emulated port ID via the session table.

15. The method of claim 9 wherein the session context is operable to maintain state information by referencing and maintaining a connection of the application in a stateful interactive voice response infrastructure to the user device by maintaining the order and
25 sequence of messages sent between the application and the user device.

16. The method of claim 10 wherein establishing the session context further comprises:

- receiving a short code corresponding to the application;
- 30 creating a session context entry in a session table based on the identity of the user device and the short code; and

referencing, via the short code, a script operative to invoke the application.

17. The method of claim 16 wherein the message is a text message including the short code for invoking the application, the short code being a unique preexisting identifier
5 within the infrastructure operative to reference and invoke a particular application for an interactive text messaging user.

18. The method of claim 11 wherein the unique preexisting identifier in the message further comprises the short code and application specific data, the application specific
10 data encapsulated in an application specific data field following a short code field.

19. The method of claim 11 wherein mapping the successive messages includes mapping successive messages from the user device to the same application by indexing the identity of the device and the unique preexisting identifier of the application into a
15 session table having session context entries of protocol specific identifiers.

20. The method of claim 19 wherein the protocol specific identifiers are further operative to identify a user and are specified according to an instant messaging protocol and further include at least one of user ID, buddy ID, screen name, AIM ID and
20 nickname.

21. The method of claim 11 wherein mapping the successive messages includes mapping successive messages from the device to the same application by indexing the identity of the device and the unique preexisting identifier of the application into a
25 session table having session context entries including at least one fuser email addresses, email addresses indicative of applications and application short codes.

22. The method of claim 21 further comprising referencing a session ID operable to index a particular session context entry including the email address of the user device and
30 indicative of the session context, the session ID computed in response to a message to the

application and operable to identify the corresponding return message from the application.

23. The method of claim 19 further comprising referencing a session ID operable to
5 index a particular session context entry including at least one protocol specific identifier
of the user device and indicative of the session context, the session ID computed in
response to a message to the application and operable to identify the corresponding return
message from the application.

10 24. The method of claim 9 further comprising referencing a session ID operable to
index a particular session context entry indicative of the session context, the session ID
computed in response to a message to the application and operable to identify the
corresponding return message from the application.

15 25. The method of claim 9 wherein the information transport infrastructure is an
interactive voice response infrastructure and establishing further comprises adapting
speech responsive components for text message operability.

20 26. The method of claim 25 wherein the mapping between the application and the
user device occurs via a text to speech interconnection component and an automatic
speech recognition interconnection component, the interconnection components operable
to integrate text message data to interfaces in the preexisting information transport
infrastructure.

25 27. The method of claim 9 wherein the session context terminates after expiration of a
reasonable predetermined timeout by the session manager.

28. A method for providing context specific application support for an interactive text
messaging user on an interactive voice response infrastructure comprising:
30 receiving an informational item from a user via a user device, the informational
item corresponding to a particular application;

identifying, via a session manager, a session context between the application and the user, the session context based on the identity of the user device and the identity of the application;

5 processing, via a script processor, a script corresponding to the identified session context, the script processor operative to receive and direct user input destined for the application; and

mapping, via the session manager, successive communications between the user device and the application by indexing the user device identity and application identity to preserve the session context by maintaining the order and sequence of informational
10 items between the user and the application.

29. A telecommunications device for remotely controlling an application from a user device comprising:

15 a message server operative to receive a first message from a device via a non-session based messaging protocol;

a session table operative for storing and maintaining a session context entry that enables mapping of messages transferred from the device using the non-session based protocol to a session-based application controlled using a session-based protocol;

20 a session manager having the session table, the session table responsive to the session manager for mapping the first message from the device, using the non-session based messaging protocol, to the session-based protocol using the stored session context, to allow the device to control the session-based application, the session manager further operable to map a second message, received from the application, using the session-based protocol, from the session-based application to the non-session based protocol using the
25 maintained session context, to return at least a portion of the second message to the device.

30. The telecommunications device of claim 29 wherein the first message corresponds to the session-based application and is indicative of a request to invoke the
30 session-based application.

31. The telecommunications device of claim 29 wherein the session manager is further operable to employ the maintained session context in the session table for successive messages between the device and the application.

5 32. The telecommunications device of claim 29 wherein the session context table is operable to identify the session context between the session-based application and the device, the session context operative to enable a stateful exchange between the session-based application and the device.

10 33. The telecommunications device of claim 32 wherein the session manager is operative to map the first message by routing, based on the identified session context, at least a portion of the message to the application, the routing operative to receive and direct user input destined for the application.

15 34. The telecommunications device of claim 33 wherein the session manager is operative to invoke an application dispatch process, the application dispatch process operable for processing an executable entity corresponding to the identified session context to receive and direct a portion of the message to the application.

20 35. The telecommunications device of claim 34 wherein the session manager is operative to preserve the session context by maintaining the sequence of messages between the device and the application.

25 36. The telecommunications device of claim 29 wherein the session manager is operative to maintain the session context based on an identity of the device and an identity of the application.

30 37. A method for invoking and using a speech based application on an existing speech processing infrastructure using a text messaging enabled device comprising:
defining a set of short codes indicative of local applications;

intercepting a short code at an interactive message manager corresponding to a particular local application

establishing a session context between the user device issuing the short code and the corresponding application;

5 transmitting, within the established session context, an informational item indicative of the invocation of the particular local application to the speech interpreter;

receiving the invocation request at a scripting component, the scripting component operable to map incoming calls to the local applications via application specific scripts while maintaining the session context; and

10 mapping the invocation request to the corresponding application.

receiving a response from the particular local application triggered by the invocation;

mapping the response back to the invoking user device via a session table operative to maintain context between the user device and the particular application;

15 receiving further informational items from the user device to the same invoked application; and

maintaining the context by mapping successive informational items between the user device and the particular application via the session table.

20 38. A computer program product having a computer readable medium operable to store computer program logic embodied in computer program code encoded thereon for providing context specific application support for an interactive user device in an information transport infrastructure comprising:

25 computer program code for receiving a message from a user via a user device, the message corresponding to an application;

computer program code for identifying a session context between the application and the user device, the session context based on an identity of the user device and an identity of the application;

30 computer program code for processing the message by the corresponding application according to the identified session context; and

computer program code for mapping successive messages between the user device and the application by indexing the user device identity and application identity to preserve the session context by maintaining the order of messages between the user device and the application.

5

39. A computer data signal having program code for providing context specific application support for an interactive user device in an information transport infrastructure comprising:

10 program code for receiving a message from a user via a user device, the message corresponding to an application;

program code for identifying a session context between the application and the user device, the session context based on an identity of the user device and an identity of the application;

15 program code for processing the message by the corresponding application according to the identified session context; and

program code for mapping successive messages between the user device and the application by indexing the user device identity and application identity to preserve the session context by maintaining the order of messages between the user device and the application.

20

40. A telecommunications device for remotely controlling an application from a user telecommunications device comprising:

means for receiving a message from a user via a user device, the message corresponding to an application;

25 means for identifying a session context between the application and the user device, the session context based on an identity of the user device and an identity of the application;

means for processing the message by the corresponding application according to the identified session context; and

30 means for mapping successive messages between the user device and the application by indexing the user device identity and application identity to preserve the

session context by maintaining the order of messages between the user device and the application.